



Colorado Business Review

BUSINESS RESEARCH DIVISION • GRADUATE SCHOOL OF BUSINESS ADMINISTRATION • UNIVERSITY OF COLORADO

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Emulating Japan: Caveat Praefectus (Let the Manager Beware)

Joseph H. Cady and William R. Soukup

Several months ago, the chief executive officer of a medium-sized high technology firm based in California received an alarming quarterly report from the company's accounting department. The contents of the report reflected the effects of a sudden increase in Japanese competition: company profits and market share were both down significantly from the corresponding quarter of the previous year. Furthermore, cost advantages of the Japanese had resulted in price reductions throughout the industry, leaving the CEO's company with a dangerously low profit margin on its existing sales.

The reaction by the CEO was typical. He swiftly organized several vice presidents into a committee in an attempt to research and rebuff the surging Japanese competition. Emphasis was placed on finding the key reasons behind the Japanese success and subsequently instilling these identical management practices at the high technology firm. The committee set out to complete the task assigned by the CEO by attending various productivity and quality control circle seminars in addition to conducting a thorough review of the current literature on the subject.

But when the CEO received the committee's final report two months later, he was shocked and dismayed as he read the findings. His staff had concluded that the one- to three-day seminars it had attended were wholly inadequate to serve as a basis for practical implementation at the high technology company. "Superficial, with insufficient depth to be of any use," wrote one committee member. Further, the group had found much of the existing literature on Japanese management to read like a high school essay entitled, "What I Saw on My Trip to Japan." Other complaints on the research to date included an absence of comprehensiveness, objectivity, or empirical evidence for the conclusions offered. Another frequent observation was the extensive contradictions prevailing among various authors and their research findings.

After reading the committee's disturbing report, the CEO begrudgingly abandoned all efforts to "turn the company Japanese." Worst of all, he now pondered—seemingly without any promising alternatives—the uncertain future of his company in light of the advancing Japanese competitive threat.

Ironically, this scenario is being repeated in numerous companies within this country. These organizations, hoping to implement Japanese management practices and reap successes similar to those of their Far East competitors, are eventually thwarted in their efforts because of the many unforeseen problems they encounter.

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THE ALLURE OF JAPANESE MANAGEMENT PRACTICE

Actually, the attraction of Japanese management practices as the saving grace for U.S. business is only natural. The abilities of the Japanese are well portrayed by the latest economic data: In 1980, Japan's GNP ranked third highest in the world, and with current growth rates extrapolated to the year 2000, Japan will surpass even the U.S. (Pascale and Athos 1981, p. 23).

Given the necessity to gain an understanding into the reasons for Japan's business and economic success, one immediately faces many serious barriers, few of which are readily apparent. According to the U.S. business press, explanations for Japan's growth include quality control circles, lifetime employment guarantees, modernization of plant and equipment, the cultural foundations of the Japanese people, futuristic attitudes of business executives, cooperation between government and business, consensus in decision-making ("ringi"), and a promotional system based on a blend of skill and seniority. (One even finds citations of such abstract sources as a 337-year-old book on Samurai sword-fighting strategy, *A Book of Five Rings*, purportedly embedded with the key philosophies of Japanese management.) As a result, some U.S. companies have proudly adopted quality control circles, "ringi," and other elements of Japanese management into their corporate structures and operating procedures in hopes of achieving levels of success similar to those enjoyed by their Japanese counterparts. Recent estimates, for example, indicate that over 500 U.S. firms now practice some variation of quality control circles with a tenfold increase predicted within the coming five years.

However, increasing numbers of these same organizations are now aborting their efforts to "turn Japanese." This results from the firm's inability to achieve the "advertised"—or even satisfactory—outcomes. Other business executives often fail to reconcile the endless inconsistencies within the writings of differing "authorities" or observers, consequently rejecting Japanese management practices as incomprehensible.

THE PROBLEMS BEHIND FAILURE

The reasons for these failures of execution and understanding go far beyond incorrect methods of implementation and the traditional problems associated with translating theory into practice. Among the most significant and prevalent problems:

- (1) Obsession of the business press to uncover a mystical and recondite explanation for Japan's recent domination (e.g., quality control circles). Recognize that typically the tendency to overgeneralize or arrive at the "simple reason why" is greatest when the pressure to arrive at an understanding is also at the highest.

- (2) Writers' efforts to portray all Japanese firms as utilizing one universal style of management (e.g., "This is what I observed in Japan. All Japanese companies are . . ."). In point of fact, practices often vary tremendously among organizations in Japan; this divergence is largely the result of environmental settings, resource positions and distinctive competencies unique to each firm.
- (3) Subjective interpretations of management terminology (e.g., one author may characterize a specific company as having a top-down, centralized organization structure while another may picture that same firm as bottom-up and decentralized).
- (4) Primary concerns of some writers to gain notoriety and financial success, rather than to conduct a thorough analysis of the data and report the facts.
- (5) Studies that have centered on the highly successful firms in Japan while almost completely ignoring the marginal firms, their characteristics, and the reasons for their demise. It should be noted that, as is the case within the U.S., Japanese businesses are occasionally liquidated. In fact, both nations have been reporting near-record levels of bankruptcy. According to widely circulated reports, more than 8,600 failures totalling \$6.5 billion occurred in Japan during the first half of 1981.
- (6) Reporting only the most spectacular successes of the Japanese, thereby setting unrealistically high expectations in the minds of U.S. executives considering the initiation of Japanese management practices within their firms.

Many would add "cultural differences" to the above list of limitations, while a seemingly equal number of scholars reject this very argument. Given that we still lack an operational definition for the term "culture" in this context (there is no consensus, for example, on whether the focus should be on national, regional, or organizational factors—or some as yet unspecified combination of these), it is hardly surprising that neither side has produced any conclusive evidence to support its contentions. Our own analysis, based on interviews and studies of business practices and the industrial environment in both countries, strongly supports the somewhat less than startling conclusion that there are both striking similarities and important differences.

Japan is *not* the monolithic industrial machine pursuing with single-minded dedication a universally agreed-on set of objectives suggested by the sobriquet, "Japan, Inc." Japanese firms compete vigorously with each other, as they do with foreign companies; leadership styles and decision-making approaches vary greatly among individual executives and firms. On the other hand, Japanese industrial society lacks the confrontational attitude that seems so deeply engrained in contemporary America and that appears to dominate so many aspects of government-business and labor-management relations. There are substantial differences in private-sector financing/stock ownership patterns which in turn appear to contribute to a far greater emphasis on, and concern for, long-range results among Japanese leaders than is true for many of their American counterparts.

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A NOTE OF CAUTION

These observations lead to what is perhaps the most compelling reason for exercising great caution in emulating the Japanese: such a course is likely to be inherently self-defeating. It is currently fashionable to attribute Japan's industrial success to its having adopted and perfected U.S. techniques. This, of course, is precisely what the Japanese did *not* do.

To be sure, the Japanese did in fact study very carefully the most successful American organizations—and, for that matter, the business, economic, and political systems of leading industrial nations throughout the world. But then, and this is the crucial point, they refused to pattern themselves precisely after the U.S. or any other single model. The Japanese government and national economy, and the underlying financial and other institutions, did not duplicate those systems of the U.S. or any other nation, nor are its management practices extensions of what they found in Detroit, Chicago, or Pittsburgh.

The genius of the Japanese lay in creating a new, uniquely Japanese approach that borrowed freely—perhaps heavily at times—but that remained essentially Japanese in character. The Japanese have, as a result, developed systems that make use, where appropriate, of the techniques and methods conceived by others, but whose essence is the ability to focus the inherent strengths of Japan's material and human resources toward the problems of late 20th century industrial and commercial conditions. Japanese leaders—government and industrial—properly concluded that only a uniquely Japanese system would be most advantageous for Japanese organizations, and that approaches developed elsewhere, no matter how effective in their home cultures, needed modification to meet Japan's needs and conditions. Any other approach would have run the serious risk of leaving Japan in the position of perpetual runner-up and of competing for world markets by using techniques already implemented by their originators. The Japanese have learned this well, and American

managers should do no less. This is *not* the time to emulate the Japanese. It *is* time to borrow from the Japanese (just as they have and will continue to borrow from us)—but to do so very selectively with a view toward adopting a system which is appropriate for the specific organization and “culture” in question.

The consequences of “going Japanese” on the basis of the incomplete, sometimes inconsistent, and often inaccurate descriptions of a “typical” Japanese firm is highly predictable. Managers who begin with a “solution” (such as quality control circles or a ringi-style approach to decision-making) rather than with a thorough understanding of their needs should expect confusion and delay in implementing these systems at best and a deterioration in organizational performance at worst.

The decision is not, as some writers would have us believe, whether to adopt Japanese management techniques; the solution to the problem instead depends on exactly what it has depended on for decades:

- (1) identification of the organization's objectives and assessment of its resources.
- (2) examination and comprehensive understanding of the environment in which the firm will operate.
- (3) selection and blending of those approaches that most closely meet the organization's specific needs.
- (4) recognition that no management system can simply be put in place and left there. Results must be monitored continuously, and new modified managerial methods adopted as the situation dictates.

Understanding Japanese management can extend very usefully the range of available techniques from which a manager can choose, but applied carelessly or improperly, they can convert a serious management problem into an unmitigated disaster.

REFERENCE

Pascale, R. T. and A. G. Athos (1981), *The Art of Japanese Management*, New York: Warner Books, Inc.

DIRECTORY OF COLORADO MANUFACTURERS

Providing a complete list of over 4,400 firms operating in Colorado as of June 15, 1983, the new 1983-84 Directory is the only complete reference available for your use.

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- **Geographical**—Pertinent information for contacting a company: firm name, mailing address, plant address, city, zip code, telephone number, SMSA, senior official's

name and title, top marketing official's name and title. Information about the company: form of organization and date of establishment, area of distribution, range of employment, and description of all products manufactured by the company. Firms are arranged alphabetically by city within the 63 Colorado counties.

- **Product**—Firm name, mailing address, city, zip code, county, telephone number, range of employment, and area of distribution. Firms are listed alphabetically according to SIC codes along with major products identified.

The Directory is available for \$45 a copy from:

Business Research Division
Graduate School of Business Administration
Campus Box 420
University of Colorado
Boulder, Colorado 80309

COLORADO BUSINESS INDICATORS
(Figures in Thousands Unless Otherwise Indicated)

	October 1983	September 1983	October 1982	Percent Change October 1983 from September 1983 October 1982	
Total Civilian Labor Force (by place of residence) ^a	1,661.5	1,663.4	1,598.0	- 0.1	4.0
Unemployment	94.7	98.9	132.5	- 4.2	-28.5
Unemployment Rate (percent)	5.7	5.9	8.3	—	—
Employment	1,566.8	1,564.5	1,465.5	0.1	6.9
Nonagricultural Wage and Salary	1,522.8	1,517.3	1,421.0	0.4	7.2
Agricultural	44.0	47.2	44.5	- 6.8	- 1.1
Total Nonagricultural Wage and Salary					
Employment (by place of work) ^a	1,350.3	1,346.7	1,313.9	0.3	2.8
Mining	39.2	39.6	41.1	- 1.0	- 4.6
Metallic Minerals	5.9	5.9	6.9	0.0	-14.5
Bituminous Coal, Lignite, and Nonmetallic	4.4	4.5	4.9	- 2.2	-10.2
Oil and Gas Extraction	29.0	29.2	29.3	- 0.7	- 1.0
Contract Construction	88.8	89.7	81.1	- 1.0	9.5
Manufacturing	183.3	182.2	179.9	0.6	1.9
Lumber, Wood Products, and Furniture	6.8	6.9	6.4	- 1.4	6.3
Stone, Clay, Glass, and Concrete Products	9.8	9.9	9.8	- 1.0	0.0
Primary and Fabricated Metals	14.3	14.2	14.6	0.7	- 2.1
Machinery, Except Electrical	27.1	26.7	25.2	1.5	7.5
Electric and Electronic Equipment	17.5	17.4	17.0	0.6	2.9
Transportation Equipment	13.5	13.6	14.3	- 0.7	- 5.6
Other Durable Goods	28.1	27.8	27.7	1.1	1.4
Food and Kindred Products	24.5	24.3	24.6	0.8	- 0.4
Textiles and Apparel	3.4	3.4	3.1	0.0	9.7
Paper and Allied Products	2.1	2.1	2.0	0.0	5.0
Printing and Publishing	19.5	19.3	18.8	1.0	3.7
Chemicals and Allied Products	8.0	7.9	7.6	1.3	5.3
Other Nondurable Goods	8.8	8.9	8.6	- 1.1	2.3
Finance, Insurance, and Real Estate	86.2	86.2	83.4	0.0	3.4
Banking	21.2	20.9	21.4	1.4	- 0.9
Credit Agencies Other than Banks	13.4	13.4	12.8	0.0	4.7
Insurance Carriers, Agents, and Brokers	20.6	20.5	20.4	0.5	1.0
Real Estate and Combination Offices	22.4	22.7	21.3	- 1.3	5.2
Other Finance, Insurance, and Real Estate	8.6	8.7	7.5	- 1.1	14.7
Transportation and Public Utilities	84.2	85.4	85.3	- 1.4	- 1.3
Railroad Transportation	5.7	5.7	5.9	0.0	- 3.4
Trucking and Warehousing	17.3	17.2	17.4	0.6	- 0.6
Air Transportation	14.0	15.5	14.1	- 9.7	- 0.7
Other Transportation	6.5	6.5	6.6	0.0	- 1.5
Communications, Electric, Gas, and Sanitary Services	40.6	40.6	41.2	0.0	- 1.5
Trade	330.7	330.4	322.5	0.1	2.5
Wholesale Trade	82.3	81.7	81.0	0.7	1.6
Retail Trade	248.4	248.6	241.4	- 0.1	3.0
Services	289.4	291.1	277.1	- 0.6	4.4
Lodging and Combination Lodging/Eating Places	26.1	27.0	25.1	- 3.3	4.0
Personal Services	15.2	15.1	14.2	0.7	7.0
Business Services	58.6	58.5	52.9	0.2	10.8
Auto and Miscellaneous Repair Services	14.7	14.7	14.2	0.0	3.5
Amusements and Recreation	17.4	18.7	15.2	- 7.0	14.5
Health Services	73.8	74.0	73.0	- 0.3	1.1
Educational Services	10.7	9.7	10.6	10.3	0.9
Membership Organizations	19.5	19.8	19.6	- 1.5	- 0.5
Other Services	53.3	53.4	52.2	- 0.2	2.1
Government	248.5	242.0	243.7	2.7	2.0
Federal	53.1	53.3	51.2	- 0.4	3.7
State	59.6	55.8	58.8	6.8	1.4
Local	135.8	133.0	133.6	2.1	1.6

	October 1983	September 1983	October 1982	Percent Change October 1983 from September 1983 October 1982	
Average Weekly Hours					
Construction	39.7	40.7	37.8	- 2.5	5.0
Manufacturing	40.5	40.6	39.1	- 0.2	3.6
Durable Goods	41.1	41.1	39.9	0.0	3.0
Nondurable Goods	39.5	40.0	38.0	- 1.3	3.9
Average Weekly Earnings (\$)					
Construction	522.85	545.79	511.06	- 4.2	2.3
Manufacturing	363.69	366.62	337.43	- 0.8	7.8
Durable Goods	377.30	379.76	352.32	- 0.6	7.1
Nondurable Goods	341.67	348.40	316.16	- 1.9	8.1
Initial Unemployment Claims (000)	15.1	15.0	21.0	0.7	-28.1
Bankruptcies, All Types (number)	460	525	565	-12.4	-18.6
Total State Revenue (\$000)	405,171	550,011	221,557	-26.3	82.9
Total State Expenditures (\$000)	433,010	548,222	331,707	-21.0	30.5
Crude Oil Production (thous. bbls.)	2,459	2,528	2,534	- 2.7	- 3.0
Dry Gas Production (mil. cu. ft.)	9,860	10,374	12,615	- 5.0	-21.8
Coal Production	1,379.3	1,383.2	1,417.6	- 0.3	- 2.7
New Oil and Gas Wells (number)	193	166	142	16.3	35.9
Natural Gas Used (bil. cu. ft.)	11.9	6.0	13.1	98.3	- 9.2
Electrical Power Sales (mil. kwh)					
Residential	466.1*	503.4	462.4	- 7.4	0.8
Nonresidential	1,003.7*	1,210.8	948.6	-17.1	5.8
New Construction, 122 places					
Residential permits (number)	2,438	2,961	1,941	-17.7	25.6
Residential value (\$000)	176,409	206,190	131,391	-14.4	34.3
Nonresidential permits (number)	438	432	292	1.4	50.0
Nonresidential value (\$000)	83,286	91,987	71,668	- 9.5	16.2
Highway Contractor Payments (\$000)	17,469	15,453	9,255	13.0	88.8
Savings and Loan Net New Savings (\$000) ^b	-1,000	-57,600	-64,900	—	—
National Park Recreational Visits—10 Areas (000) ^b	380.8	1,004.0	342.3	-62.1	11.2
Motor Vehicle Title Applications (000)	90.2	107.2	99.5	-15.9	- 9.3
Highway Vehicle Traffic Counts at Border					
Stations (daily average)	35,820*	41,779*	37,222	-14.3	- 3.8
Air Passengers, Stapleton (000) ^c	1,854	1,927	1,902	- 3.8	- 2.5
Air Freight and Air Express, Stapleton (thous. lbs.)	27,198	30,469	28,311	-10.7	- 3.9
Prices Received by Farmers (\$)					
Beef Cattle (per cwt)	57.20	57.30	58.30	- 0.2	- 1.9
Lamb (per cwt)	51.80	47.90	50.40	8.1	2.8
Wheat (per bu.)	3.28	3.31	3.26	- 0.9	0.6
Corn (per bu.)	3.14	3.15	2.33	- 0.3	34.8
Potatoes (per cwt)	4.95	6.85	4.25r	-27.7	16.5
Wool	.60	.60	.54r	0.0	11.1

NOTES: An asterisk (*) indicates preliminary data subject to revision.
Revised data are marked (r).
n.r.—not reported.

^aEmployment figures have been updated to a December 1981 benchmark and are arranged by 1972 Standard Industrial Classifications (SIC). Previously reported data were on a March 1981 benchmark. Thus, these data are not comparable to that published prior.

^bNew series, thus figures are not comparable to those previously published.

^cIncludes scheduled airlines, commuter airlines, and charter passengers.

Crude Oil Production, Dry Gas Production and New Oil and Gas Wells from the Oil and Gas Conservation Commission.

Coal Production from Colorado State Coal Mine Inspection Department.

Natural Gas Used from Colorado Interstate Gas Company.

Electrical Power Sales from 17 individual companies.

New Construction from Bureau of the Census, U.S. Department of Commerce.

Highway Contractor Payments from the Colorado Highway Department.

Life Insurance Sales from the Life Insurance Marketing and Research Association, Inc.

Savings and Loan Net New Savings from Federal Home Loan Bank of Topeka.

Recreational Visits from National Park Service, Denver.

Highway Traffic counts from Colorado Highway Department.

Air Passengers, Freight, and Express from Stapleton International Airport Business Office.

Prices Received by Farmers from U.S. Department of Agriculture.

Employment, Hours, and Earnings data from Colorado Department of Labor and Employment.

Bankruptcies from the Office of the Federal Referee in Bankruptcy.

State Revenue and Expenditures from the State Controller's Office.

LOCAL BUSINESS CONDITIONS
(All Figures in Thousands)

	October 1983	September 1983	October 1982		October 1983	September 1983	October 1982
ALAMOSA (1982 pop. 7,182)				DENVER (1982 pop. 500,600)			
Electric Power (kwh)	3,050	3,138	3,304	Electric Power (kwh)	356,824	367,136	328,674
Constr. (\$)—Res.	60	0	222	Constr. (\$)—Res.	12,731	12,845	6,476
—Nonres.	0	0	20	—Nonres.	8,113	6,326	30,728
Deposits (\$) (2 of 2 banks)	54,195	52,890	47,330	Deposits (\$) (40 of 45 banks)	7,084,589*	7,309,808	6,528,080
ARVADA (1982 pop. 91,262)				DURANGO (1982 pop. 12,276)			
Electric Power (kwh)	27,773	30,065	26,134	Electric Power (kwh)	6,567	5,964	6,596
Constr. (\$)—Res.	4,066	2,682	397	Constr. (\$)—Res.	72	359	71
—Nonres.	350	948	109	—Nonres.	2,081	239	22
Deposits (\$) (4 of 5 banks)	113,527	111,493	92,152	Deposits (\$) (3 of 3 banks)	138,289	140,954	119,617
ASPEN (1982 pop. 4,081)				ENGLEWOOD (1982 pop. 30,555)			
Electric Power (kwh)	2,544	2,635	3,134	Electric Power (kwh)	21,773	23,970	19,128
Constr. (\$)—Res.	400	0	100	Constr. (\$)—Res.	295	198	128
—Nonres.	0	1,090	2,180	—Nonres.	532	2,596	365
Deposits (\$) (2 of 3 banks)	74,375	78,781	75,625	Deposits (\$) (7 of 12 banks)	422,988	427,465	347,049
AURORA (1982 pop. 178,665)				ESTES PARK (1982 pop. 2,934)			
Electric Power (kwh)	80,624	100,533	76,528	Electric Power (kwh)	4,295	4,701	4,533
Constr. (\$)—Res.	20,960	24,412	34,550	Constr. (\$)—Res.	448	502	0
—Nonres.	975	4,899	2,482	—Nonres.	0	0	200
Deposits (\$) (10 of 14 banks)	275,114*	278,941	206,309	Deposits (\$) (2 of 2 banks)	43,850	44,849	38,916
BOULDER (1982 pop. 80,651)				FORT COLLINS (1982 pop. 68,307)			
Electric Power (kwh)	55,032	62,973	46,159	Electric Power (kwh)	37,949	48,386	37,028
Constr. (\$)—Res.	2,859	7,237	2,202	Constr. (\$)—Res.	5,116	4,722	2,482
—Nonres.	2,350	2,775	2,240	—Nonres.	650	391	282
Deposits (\$) (10 of 10 banks)	592,979*	599,889	486,326	Deposits (\$) (8 of 8 banks)	415,545	418,166	381,142
BRIGHTON (1982 pop. 13,239)				FORT MORGAN (1982 pop. 8,913)			
Electric Power (kwh)	4,659	5,383	4,855	Electric Power (kwh)	6,163	8,611	6,874
Constr. (\$)—Res.	567	0	0	Constr. (\$)—Res.	23	364	0
—Nonres.	90	940	36	—Nonres.	0	0	0
Deposits (\$) (2 of 2 banks)	n.r.	63,210	52,142	Deposits (\$) (3 of 3 banks)	100,076	99,837	89,393
BROOMFIELD (1982 pop. 22,452)				GLENWOOD SPRINGS (1982 pop. 5,000)			
Electric Power (kwh)	9,851	9,545	6,966	Electric Power (kwh)	5,014	4,900	4,337
Constr. (\$)—Res.	1,246	3,176	130	Constr. (\$)—Res.	120	340	299
—Nonres.	322	0	561	—Nonres.	217	0	433
Deposits (\$) (2 of 2 banks)	64,960	65,028	53,192	Deposits (\$) (3 of 3 banks)	131,034	127,046	117,868
CANON CITY (1982 pop. 13,576)				GOLDEN (1982 pop. 13,109)			
Electric Power (kwh)	23,818	24,962	23,916	Electric Power (kwh)	5,776	6,090	5,789
Constr. (\$)—Res.	185	259	0	Constr. (\$)—Res.	122	601	57
—Nonres.	8	0	0	—Nonres.	0	0	0
Deposits (\$) (3 of 3 banks)	112,819	111,422	101,996	Deposits (\$) (3 of 3 banks)	163,393	159,217	129,702
COLORADO SPRINGS (1982 pop. 230,553)				GRAND JUNCTION (1982 pop. 32,082)			
Electric Power (kwh)	159,414	168,144	156,092	Electric Power (kwh)	20,876	23,319	18,748
Constr. (\$)—Res.	33,133	41,046	15,968	Constr. (\$)—Res.	110	1,542	302
—Nonres.	14,994	18,063	14,890	—Nonres.	291	9,911	1,830
Deposits (\$) (17 of 20 banks)	985,307*	1,005,242*	891,665	Deposits (\$) (5 of 5 banks)	340,283	335,520	348,304
COMMERCE CITY (1982 pop. 16,412)				GREELEY (1982 pop. 54,063)			
Electric Power (kwh)	23,758	27,602	33,939	Electric Power (kwh)	22,600	30,688	24,243
Constr. (\$)—Res.	0	30	280	Constr. (\$)—Res.	966	2,627	281
—Nonres.	0	805	84	—Nonres.	68	43	481
Deposits (\$) (1 of 1 bank)	28,860	27,363	26,098	Deposits (\$) (9 of 9 banks)	482,887	484,681	415,353
CORTEZ (1982 pop. 7,489)				GUNNISON (1982 pop. 6,031)			
Electric Power (kwh)	3,406	3,817	2,352	Electric Power (kwh)	3,736	3,330	3,807
Constr. (\$)—Res.	81	136	44	Constr. (\$)—Res.	0	32	0
—Nonres.	75	45	162	—Nonres.	495	495	0
Deposits (\$) (3 of 3 banks)	95,642	91,051	84,354	Deposits (\$) (2 of 2 banks)	52,055	52,367	47,110
CRAIG (1982 pop. 10,000)				LA JUNTA (1982 pop. 8,338)			
Electric Power (kwh)	3,985	4,210	3,588	Electric Power (kwh)	4,571	5,094	4,362
Constr. (\$)—Res.	0	0	92	Constr. (\$)—Res.	50	60	85
—Nonres.	40	0	0	—Nonres.	0	0	0
Deposits (\$) (2 of 2 banks)	64,164	63,670	74,783	Deposits (\$) (2 of 2 banks)	57,173	55,860	49,727

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LOCAL BUSINESS CONDITIONS—Continued

	October 1983	September 1983	October 1982		October 1983	September 1983	October 1982
LAFAYETTE (1982 pop. 10,115)				ROCKY FORD (1982 pop. 4,574)			
Electric Power (kwh)	2,550	2,826	2,427	Electric Power (kwh)	5,827	6,802	5,435
Constr. (\$)—Res.	328	1,277	614	Constr. (\$)—Res.	0	0	0
—Nonres.	407	0	0	—Nonres.	0	0	8
Deposits (\$) (1 of 1 bank)	16,764	17,066	15,552	Deposits (\$) (1 of 2 banks)	15,021	15,114	13,609
LAKEWOOD (1982 pop. 117,436)				SALIDA (1982 pop. 4,478)			
Electric Power (kwh)	65,139	60,441	56,371	Electric Power (kwh)	1,703	1,553	1,490
Constr. (\$)—Res.	3,751	7,843	8,880	Constr. (\$)—Res.	0	67	0
—Nonres.	2,385	8,417	0	—Nonres.	0	0	0
Deposits (\$) (12 of 12 banks)	547,102*	571,106	500,593	Deposits (\$) (2 of 2 banks)	39,932	39,072	40,118
LAMAR (1982 pop. 7,793)				STERLING (1982 pop. 11,470)			
Electric Power (kwh)	6,491	9,743	5,902	Electric Power (kwh)	6,043	7,215	6,636
Constr. (\$)—Res.	127	169	0	Constr. (\$)—Res.	0	49	0
—Nonres.	35	0	380	—Nonres.	0	0	221
Deposits (\$) (2 of 2 banks)	82,608	82,469	71,083	Deposits (\$) (3 of 3 banks)	147,613	142,434	132,968
LITTLETON (1982 pop. 30,001)				THORNTON (1982 pop. 44,130)			
Electric Power (kwh)	16,635	18,184	13,556	Electric Power (kwh)	17,090	17,366	14,866
Constr. (\$)—Res.	1,468	1,926	1,838	Constr. (\$)—Res.	8,794	2,710	703
—Nonres.	1,251	860	1,475	—Nonres.	47	0	0
Deposits (\$) (9 of 11 banks)	182,214*	185,045*	192,310	Deposits (\$) (1 of 1 bank)	28,249	27,811	24,232
LONGMONT (1982 pop. 46,313)				TRINIDAD (1982 pop. 9,900)			
Electric Power (kwh)	22,910	25,449	19,257	Electric Power (kwh)	2,766	2,947	2,668
Constr. (\$)—Res.	3,121	2,689	1,253	Constr. (\$)—Res.	150	41	0
—Nonres.	455	2,631	0	—Nonres.	0	0	175
Deposits (\$) (5 of 5 banks)	218,948	216,082	184,893	Deposits (\$) (2 of 2 banks)	59,865	59,288	53,115
LOUISVILLE (1982 pop. 6,067)				WESTMINSTER (1982 pop. 54,965)			
Electric Power (kwh)	9,823	10,340	8,959	Electric Power (kwh)	22,988	23,739	17,558
Constr. (\$)—Res.	826	1,260	5,170	Constr. (\$)—Res.	7,966	6,472	5,514
—Nonres.	2,516	0	864	—Nonres.	1,335	727	600
Deposits (\$) (2 of 2 banks)	28,110	29,133	19,223	Deposits (\$) (3 of 3 banks)	106,412	102,523	88,184
LOVELAND (1982 pop. 30,962)				WHEAT RIDGE (1982 pop. 31,743)			
Electric Power (kwh)	19,821	20,674	16,841	Electric Power (kwh)	21,617	23,787	20,153
Constr. (\$)—Res.	1,508	862	933	Constr. (\$)—Res.	778	1,203	1,215
—Nonres.	618	0	0	—Nonres.	0	984	0
Deposits (\$) (4 of 4 banks)	154,741	152,794	135,820	Deposits (\$) (2 of 2 banks)	92,505	90,603	75,952
MONTROSE (1982 pop. 8,895) ^b							
Constr. (\$)—Res.	30	187	64				
—Nonres.	44	0	72				
Deposits (\$) (3 of 3 banks)	117,483	116,338	106,298				
NORTHGLENN (1982 pop. 30,980)							
Electric Power (kwh)	11,056	12,204	9,692				
Constr. (\$)—Res.	92	176	0				
—Nonres.	180	1,383	0				
Deposits (\$) (2 of 3 banks)	68,815	68,884	58,809				
PUEBLO (1982 pop. 99,619)							
Electric Power (kwh)	46,952	55,275	47,970				
Constr. (\$)—Res.	294	343	483				
—Nonres.	721	388	322				
Deposits (\$) (8 of 9 banks)	405,008	395,194	361,342				

^aRegional figures.

^bElectric Power consumption figures are not available.

NOTES: Population figures are preliminary 1982 estimates by the Demographic Section, Colorado Division of Local Government.
Construction figures are valuation of new residential and nonresidential construction only.
Deposit figures are total deposits in commercial banks as of last day of month.
n.r.—not reported
*—preliminary data
r—revised data